



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/566,602

08/07/2006

Yongliang Xu

4202-02100

5771

30652

7590

05/10/2010

CONLEY ROSE, P.C.

5601 GRANITE PARKWAY, SUITE 750

PLANO, TX 75024

EXAMINER

WILSON, ROBERT W

ART UNIT

PAPER NUMBER

2475

MAIL DATE

DELIVERY MODE

05/10/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/566,602	<b>Applicant(s)</b> XU, YONGLIANG	
	<b>Examiner</b> ROBERT W. WILSON	<b>Art Unit</b> 2475	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 5-6, 8, 16, & 19-22 is/are rejected.
- 7) ☒ Claim(s) 3,4,7,9-15,17 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :01/31/2006 and 09/13/2007 and 08/26/2008 and 05/06/2009.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 6, 8, 16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noake (US 6,822,962) in view of Basso (US Patent Pub. No.: US2006/0256795).

Referring to claim 1, Noake teaches: a method for migration between a permanent connection and a switched connection in a transmission network (method of switching or migrating from a PVC or permanent connection to a SVC or switched connection in network (102 and 103 per Fig 3) per col. 6 lines 57 to col. 7 line 59 the method comprising:

A ) after receiving a message or connection migrating request (after receiving a instruction for bypass a switching path or PVC per col. 6 lines 65 to col. 7 line 5) forwarding by an ingress node of a current connection the message of connection migrating request node by node in the direction of traffic signal transmission of the current connection starting from the ingress node until an egress node of the current connection (a call setup message for bypassing is forward by ATM Switch (100a) or ingress node which has a current PVC connection and the call setup request is sent to ATM Switch (100B) which is the egress switch in a node by node fashion per col. 6 line 57 to col. 7 line 59) the message being signaling comprising the connection migrating request and is transmitted (The call setup request is a message to change from a PVC connection to a SVC connection or signaling which is for changing or migrating from a PVC to a SVC. The call setup request is transmitted by ATM switch (100A) to ATM switch (100B) per Fig 1 and per col. 6 line 57 to col. 7 line 59)

B ) making migrating between the permanent connection and the switch connection node by node after receiving the connection migration request (Upon receiving the call request message within each switch by the call controller the SVC is setup in place of the PVC per col. 6 line 57 to col. 7 line 59)

Art Unit: 2475

Noake does not expressly call for: message transmitted on a control plane.

Basso teaches: message transmitted on a control plane (setup request message sent on control plane per Pg 2 Para [0028])

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the message transmitted on a control plane of Basso in place of the request message of Noake because the network will alert source sending node when the call request message has not been received by the destination which will result in improved performance.

Referring to claim 2 the combination of Noake and Basso teach the method of claim 1 and Noake teaches: wherein the step of forwarding the message of connection migrating request (call setup per Fig 10 is sent over one link) and the step of making the migration of a node (connect or making migration to a SVC per Fig 10 is sent over another link) and connection migrating request (call setup per Fig 10) is transferred via a plurality of control links (Call setup and connect are sent over two different links per Fig 10)

Noake does not expressly call for: message transmitted on a control plane.

Basso teaches: control plane (control plane per Pg 2 Para [0028])

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the control plane of Basso in place of the request message of Noake because the network will alert source sending node when the call request message has not been received by the destination which will result in improved performance.

In addition Naoake teaches:

Regarding claim 6, wherein the migration between the permanent connection and the switched connection node by node in step b (Changing from PVC or permanent connection to a SVC or switched connection is made node by node per col. 6 line 57 to col. 7 line 59) comprises: making the migration between the permanent connection and the switched connection node by node starting from the egress node until the ingress node in a reverse direction of the forwarding path of the message of the connection migrating request after the message of the connection migrating request reaches the egress node (Connect is sent in the reverse direction from switch 100B or egress to switch 100a or ingress after having received the Call setup or migration request per fig 10)

Regarding claim 8, wherein the migration between the permanent connection and the switched connection node by node in the step b (col. 6 line 57 to col. 7 line 59) comprises: each node making the migration between the permanent connection and

Art Unit: 2475

the switched connection after receiving the message of connection migrating request (100a and 100B or nodes change from PVC to SVC after receiving the call request per col. 6 line 57 to col. 7 line 59)

Regarding claim 16, wherein if the migration between the permanent connection and the switched connection is a migration from the switched connection to the permanent connection the message of connection migrating request received by the ingress node comprises: an identifier of a current switched connection (message to switch from SVC to PVC per col. 12 lines 38 to 67 contains a SVC logical line No. or identifier per col. 12 lines 64-67)

Regarding claim 19, wherein if the migration between the permanent connection and the switched connection is a migration from the switched connection to the permanent connection (Switch from SVC to PVC per col. 12 lines 38 to 67) the message of the connection migrating request received by the ingress node (call release received by 100A which has SVC logical line No.: per col. 12 lines 64-67)

2. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noake (US 6,822,962) in view of Basso (US Patent Pub. No.: US2006/0256795) further in view of Lau (U.S. Patent No.: 7,093,160)

Referring to claim 5, the combination of Noake and Basso teach: the method according to claim 2 and the control plane and making the migration between the permanent connection and switched connection.

The combination of Noake and Basso do not expressly call for: wherein the control plane is based on TCP/IP protocol and switching is implemented by using RSVP-TE signaling protocol

Lau teaches: wherein the control plane is based on TCP/IP protocol and switching is implemented by using RSVP-TE signaling protocol (Fig 2 and per col. 5 line 5 to 25)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the control plane based on TCP/IP protocol and switching is implemented by using RSVP-TE signaling protocol of Lau in place of the control plane processing of the combination of Noake and Basso in order to implement the control plane processing which is standard compliant so that the system will interoperate with other standards based system.

Art Unit: 2475

3. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noake (US 6,822,962) in view of Basso (US Patent Pub. No.: US2006/0256795) further in view of Derango (U.S. Patent No.: 5,761,193)

Referring to claim 20, the combination of Noake and Basso teach: the method according to claim 1 and a connection

The combination of Noake and Basso do not expressly call for: connection is bidirectional or unidirectional

Derango teaches: connection is bidirectional or unidirectional (SVC connection is bidirectional per col. 3 lines 55-64 and PVC is bi-direction and unidirectional per col. 7 lines 27 to 36)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the connection is bidirectional or unidirectional of Derango in place of the connection of the combination of Noake and Basso in order to build a system in which the connections are standards compliant in order to interoperate with standards based system.

4. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noake (US 6,822,962) in view of Basso (US Patent Pub. No.: US2006/0256795) further in view of Tooker (U.S. Patent No.: 6,775,288)

Referring to claim 20, the combination of Noake and Basso teach: the method according to claim 1 and the switched connection

The combination of Noake and Basso do not expressly call for: switched connection is a soft permanent connection initiated by a network management system.

Tooker teaches: switched connection is a soft permanent connection initiated by a network management system (SVC assigned by NMS per col. 4 lines 46 to 57).

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the switched connection is a soft permanent connection initiated by a network management system of Tooker to the processing which sends a call request to change to a SVC of the combination of Noake and Basso because in order to initiate a call request a system is required to perform the task.

Art Unit: 2475

5. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noake (US 6,822,962) in view of Basso (US Patent Pub. No.: US2006/0256795) further in view of Kawakami (U.S. Patent No.: 6,721,413)

Referring to claim 22, the combination of Noake and Basso teach: the method according to claim 1 and the transmission network

The combination of Noake and Basso do not expressly call for: transmission network is Synchronous Digital Hierarchy

Kawakami teaches: transmission network is Synchronous Digital Hierarchy (ATM with SVC and PVC sent over Synchronous Digital Hierarchy per col. 4 lines 44 to 61)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the transmission network is Synchronous Digital Hierarchy of Kawakami in place network of the combination of Noake and Basso in order to delivery ATM which is a fast packet technology over a very fast and efficient infrastructure which has can provide adequate bandwidth to send the fast packets.

#### ***Allowable Subject Matter***

5. Claims 3-4, 7, 9-15, & 17-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Amendment***

6. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT W. WILSON whose telephone number is (571)272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on 571/272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2475

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert W Wilson/  
Primary Examiner, Art Unit 2475

RWW  
5/6/10